

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Andrew W. Dornbusch

Title: Polyphase Filter With Passband Compensation and Method Therefor

App. No.: 10/814,615

Filed: 03/31/2004

Examiner: BAYARD, Emmanuel

Group Art Unit: 2611

Atty. Dkt No.: 1052-0010

Confirmation No.: 5474

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**MAIL STOP AF**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**REMARKS IN SUPPORT OF PRE-APPEAL  
BRIEF REQUEST FOR REVIEW**

Dear Commissioner:

In response to the Final Office Action mailed April 8, 2008 (hereinafter “the Final Action”), and the Advisory Action mailed June 16, 2008, and pursuant to the Notice of Appeal and Pre-Appeal Brief Request for Review submitted herewith, Applicant requests review of the following issues on appeal. In order to facilitate full consideration of the Remarks filed herewith, the Applicant respectfully requests that the Art Unit Supervisor designate a panel composed of at least three examiners.

The dispute between the Examiner and Applicant is straightforward. Applicant previously asserted and continues to assert that the Examiner has failed to establish even a *prima facie* case of obviousness, because a clear limitation contained in all independent claims is missing from the combinations of references provided by the Examiner. See M.P.E.P. 2142. Moreover the one reference alleged to disclose or suggest the missing limitation, in fact teaches away from the missing limitation.

To summarize, all pending claims 1-17 and 19-38 stand rejected. Claims 1-17 and 19-20 stand rejected under 35 U.S.C. 103(a) over U.S. Patent No. 6,236,847 (Stikvoort) in view of U.S.

Patent No. 6,529,100 (Okanobu), and claims 21-38 stand rejected under 35 U.S.C. 103(a) over U.S. Patent No. 7,251,298 (Hietala) in view of Stikvoort and in further view of Okanobu.

In the Response to the Final Office Action, Applicant pointed to this missing limitation: “wherein resistances of resistors of each preceding stage of said at least three polyphase filter stages are related to resistances of corresponding resistors of a succeeding stage of said at least three polyphase filter stages by a predetermined ratio.” Moreover Applicant pointed out that the Okanobu passage doesn’t in fact relate to the missing limitation. Finally Applicant pointed out how Okanobu teaches away from the missing limitation.

Nonetheless in the Advisory Action, the Examiner stated:

The amendment will not be entered because Applicant’s arguments are not persuasive enough. Therefore this case stands rejected as stated in the final office action dated 4/8/08.

Unfortunately, these comments were not responsive to Applicant’s Remarks.

The U.S. Supreme Court recently ruled on the law in the obviousness area. The Court made it clear that to sustain a prior art rejection based on obviousness, the Examiner must make an “explicit” analysis that contains some “articulated reasoning”, and cannot sustain a rejection by “mere conclusory statements.” KSR International Co. v. Teleflex Inc., 550 U.S. \_\_\_\_\_, 127 S.Ct. 1727, 1741 (2007), citing with approval In re Kahn, 441 F.3d 977, 998 (Fed. Cir. 2006). See also MPEP § 2142. Moreover, the KSR court affirmed that teaching away defeats obviousness. See KSR, 550 U.S. at \_\_\_, 127 S.Ct. at 1740, citing with approval United States v. Adams, 383 U.S. 39, 40, 86 S.Ct 708, (1966). See also M.P.E.P. 2141.04 VI.

First, the Examiner’s analysis is incorrect because the Okanobu passage does not in fact say what the Examiner alleges it says. In the Final Action the Examiner stated: “It would have been obvious to one of ordinary skill in the art to implement the teaching of Okanobu into Stikvoort as to determine the amount of specific attenuation required for suppressing the image signal components and specific band as taught by Okanobu (see col.7, lines 60-67).” However a close review of the Okanobu passage reveals that it does not support the Examiner’s conclusion, because it only relates to the number of stages, not to the relationship of the resistances of resistors between each stage. Okanobu states at col. 7, lines 61-63:

The *number of the stages* of the polyphase filter 17 is determined based on the amount of attenuation required for suppressing the image signal components and specific band.

(emphasis added).

Second, Okanobu teaches away from this limitation shortly after this passage. In col. 8, lines 3-11 Okanobu discloses preferred ratios of resistors between the stages of the polyphase filter:

R11=R21=R31=R41;  
R12=R22=R32=R42;  
R13=R23=R33=R43;  
R14=R24=R34=R44;  
R15=R25=R35=R45; and  
R11:R12:R13:R14:R15 = 1:2:4:4:8.

(emphasis added). This relationship is not a “predetermined ratio” between at least three stages as recited.

Thus a polyphase filter having the claimed limitation as recited in independent claims 1, 10, and 16 would not have been obvious to one of ordinary skill in the art in view of Stikvoort and Okanobu. Claims 2-9, 11-15, and 19-20 are not obvious for at least the reasons their corresponding underlying base claims are not obvious.

The other independent claims, claims 21 and 33, also recite the same missing limitation, and the additional Hietala reference also fails to show or suggest this missing limitation. Claims 22-32 and 34-38 are not obvious for at least the reasons their corresponding underlying base claims are not obvious.

In summary, the Examiner has failed to make out a *prima facie* case of obviousness because an express limitation contained in all the claims is simply missing. The “explicit analysis” fails because the passage cited by the Examiner does not say what it is alleged to say. Moreover the Okanobu actually teaches away from this missing limitation. The U.S. Supreme Court has ruled clearly on both of these points, and the pending claims are simply not obvious over the prior art of record.

## CONCLUSION

As discussed above, the Office has failed to meet its burden of establishing a *prima facie* case of obviousness, because the proposed combinations of the cited references lack a limitation recited in all of the pending claims. Accordingly, reconsideration and withdrawal of these rejections is respectfully requested.

Respectfully submitted,

/paul j polansky/  
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July 8, 2008  
Date

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) <b>1052-0010</b>											
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]  on _____  Signature _____  Typed or printed name _____	Application Number <b>10/814,615</b>		Filed <b>03/31/2004</b>										
	First Named Inventor <b>Andrew W. Dornbusch</b>												
	Art Unit <b>2611</b>		Examiner <b>BAYARD, Emmanuel</b>										
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table style="width: 100%; border: none;"><tr><td style="width: 50%; vertical-align: top; padding: 5px;"><input type="checkbox"/> applicant/inventor.</td><td style="width: 50%; text-align: center; padding: 5px;">/paul j polansky/</td></tr><tr><td style="vertical-align: top; padding: 5px;"><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</td><td style="text-align: center; padding: 5px;">Signature <b>Paul J. Polansky</b></td></tr><tr><td style="vertical-align: top; padding: 5px;"><input checked="" type="checkbox"/> attorney or agent of record.      <b>33,992</b> Registration number _____</td><td style="text-align: center; padding: 5px;">Typed or printed name <b>(512) 439-7100</b></td></tr><tr><td style="vertical-align: top; padding: 5px;"><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</td><td style="text-align: center; padding: 5px;">Telephone number <b>2008-July-08</b></td></tr><tr><td></td><td style="text-align: center; padding: 5px;">Date</td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>				<input type="checkbox"/> applicant/inventor.	/paul j polansky/	<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	Signature <b>Paul J. Polansky</b>	<input checked="" type="checkbox"/> attorney or agent of record. <b>33,992</b> Registration number _____	Typed or printed name <b>(512) 439-7100</b>	<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____	Telephone number <b>2008-July-08</b>		Date
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	Date												
<input type="checkbox"/> *Total of _____ forms are submitted.													

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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